## VSP homologies (Fig.1)

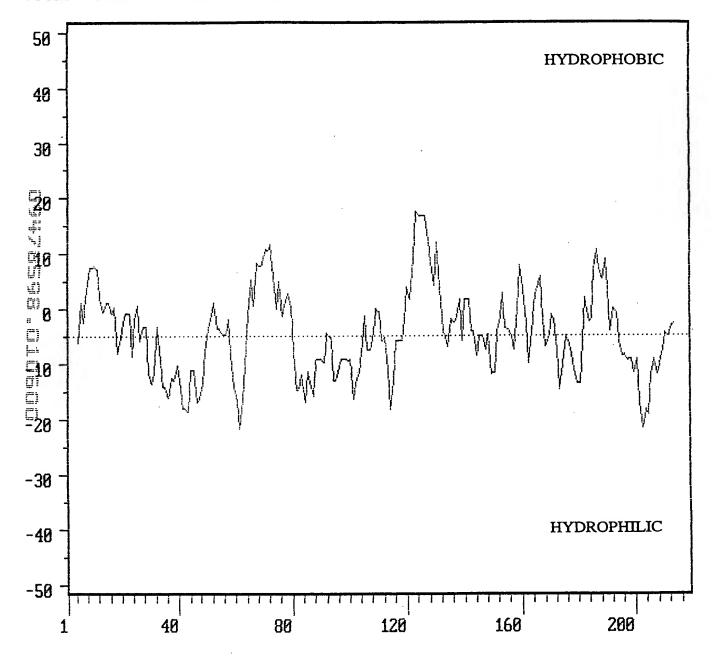
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Figure 2
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VSPB-Met10					M														М											<del>M</del>
VSP9-Met20					M														М											M
VSPβ-Met30	<u> </u>				M														М						М					M
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VSPβ	ΕI	P	T	ĸ	<u>33</u>	Y		<del></del>		40				_	45					50					55					60
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VSPP-Met30 VSPP-Met30 VSPP-Met30 VSPP-Met30 VSPP-Met30 VSPP-Met30 VSPP-Met30 VSPP-Met30	M M M 151 H				155 Q		M		K	M M 160 D			L	ı M M	M M 165			M M	L	170 S		M K			175 M M M	M M			G L M M M M	M M 180
VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30	M M M 151 H	Ť	w	E	155 Q	L	M M	L	K	M M 160 D M 190	P	н	L	M M	M M 165 T 195	P	N	M M M	L M	170 S	Y	M K	S	A	175 M M M	M M M	E	N [	G L M M M M	M M 180 L 210
VSPB-Met10 VSPP-Met20 VSPB-Met30 VSPB-Met10 VSPB-Met20 VSPB-Met20 VSPB-Met20 VSPB-Met20 VSPB-Met20 VSPB-Met20	M M M 151 H	Ť	w	E	155 Q	L	M M	L	K I	M M 160 D M 190	P	н	L	M M	M M 165 T 195	P	N	M M M	L M	170 S	Y	M K	S	A	175 M M M	M M M	E	N [	G L M M M M	M M 180 L 210
VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30 VSPB-Met30	M M M 151 H	Ť	w	E	155 Q	L	M M	L	K	M M 160 D M 190	P	н	L	M M	M M 165 T 195	P	N	M M M	L M	170 S	Y	M K	S	A	175 M M M	M M M	E	N [	G L M M M M	M M 180 L 210
VSPB-Met10 VSPP-Met20 VSPB-Met30 VSPB-Met10 VSPB-Met20 VSPB-Met20 VSPB-Met20 VSPB-Met20 VSPB-Met20 VSPB-Met20	M M M 151 H	Ť	w	E	155 Q	L	M M	L	K I	M M 160 D M 190	P	н	L	M M	M M 165 T 195	P	N	M M M	L M	170 S	Y	M K	S	A	175 M M M	M M M	E	N [	G L M M M M	M M 180 L 210
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VSPP-Met30	L M M M M 151 H 181 R 211	q	W G	E Y	155 Q 185 R	L	M M M	G 218	K I	M M 160 D M 190	P	н	L	M M	M M 165 T 195	P	N	M M M	L M	170 S	Y	M K	S	A	175 M M M	M M M	E	N [	G L M M M M	M M 180 L 210
VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met20 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30	M M M 151 H	Ť	w	E Y	155 Q 185 R	L	M M M	6	K I	M M 160 D M 190	P	н	L	M M	M M 165 T 195	P	N	M M M	L M	170 S	Y	M K	S	A	175 M M M	M M M	E	N [	G L M M M M	M M 180 L 210
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VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met20 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30 VSPβ-Met30	L M M M M 151 H 181 R 211	q	W G	E Y	155 Q 185 R	L	M M M	G 218	K I	M M 160 D M 190	P	н	L	M M	M M 165 T 195	P	N	M M M	L M	170 S	Y	M K	S	A	175 M M M	M M M	E	N [	G L M M M M	M M 180 L 210

Fig. 3A Hydropathy index computation for sequence VSPB.

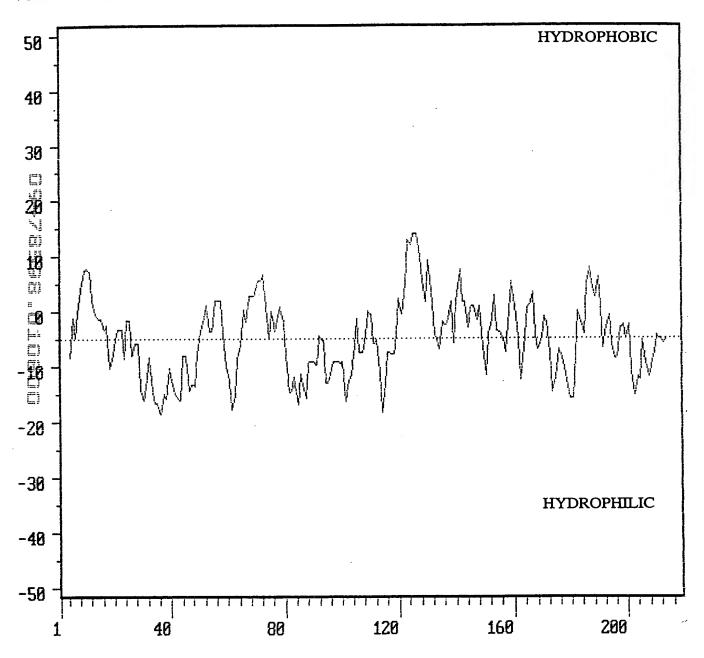
Total number of amino acids is: 218.



Hydropathic index of USPB from amino acid 1 to amino acid 218. Computed using an interval of 9 amino acids. (GRAVY = -4.95).

Fig. 3B Hydropathy index computation for sequ nce VSPM10

Total number of amino acids is: 218.

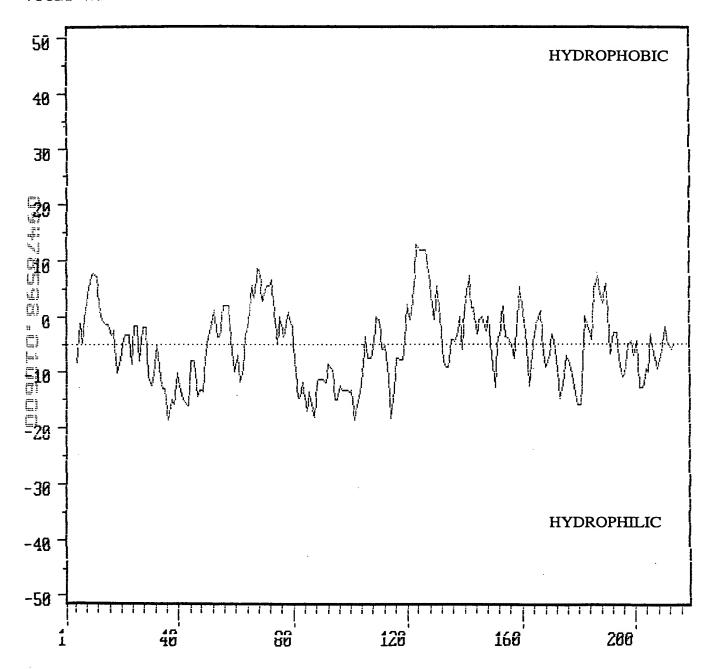


Hydropathic index of VSPM1 from amino acid 1 to amino acid 218. Computed using an interval of 9 amino acids.

Fig. 3C

Hydropathy index computation for sequence VSPM20.

Total number of amino acids is: 218.

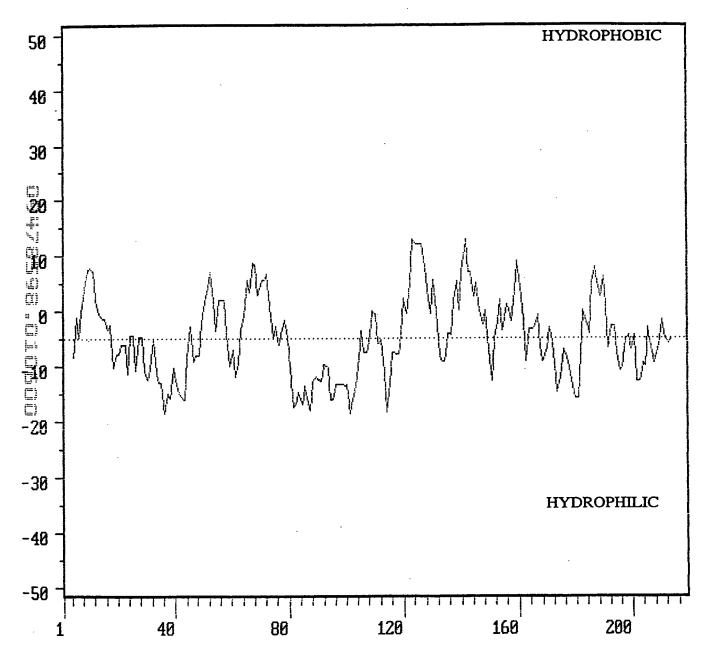


Hydropathic index of VSPM26 from amino acid 1 to amino acid 218. Computed using an interval of 9 amino acids. (GRAVY = -5.68).

Fig. 3D

Hydr pathy ind x computation for sequence VSPM30.

Total number of amino acids is: 218.



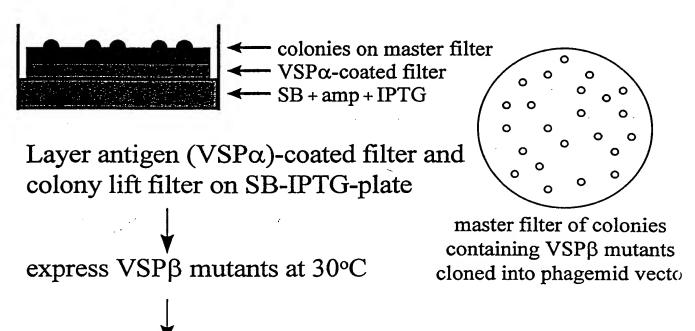
Hydropathic index of VSPM30 from amino acid 1 to amino acid 218. Computed using an interval of 9 amino acids. (GRAVY = -5.31).

## Figure 4

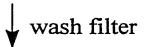
## VSPβ-met10 sequence

	<u>SfiI</u>	
1	GGCCCAGCCGGCCAGATCTTCGGAGATGAAATGCGCTAGCTTTAGGCTTGCTGTGGAAGC	60
	CCGGGTCGGCCGGTCTAGAAGCCTCTACTTTACGCGATCGAAATCCGAACGACACCTTCG	
61	<u>ACACAACATGCGAGCCTTTAAAACCATTCCTGAAGAGTGCATGGAACCAACAAAGGACTA</u>	120
	TGTGTTGTACGCTCGGAAATTTTGGTAAGGACTTCTCACGTACCTTGGTTGTTTCCTGAT	
121	CATGAATGGCGAACAATTTCGAATGGACTCTAAAACAGTTAACCAACAGGCCTTCTTTTA	180
	GTACTTACCGCTTGTTAAAGCTTACCTGAGATTTTGTCAATTGGTTGTCCGGAAGAAAAT	
181	TGCTAGTGAAATGGAAATGCATCACAACGACATGTTTATATTCGGCATGGATAACACCAT	240
	ACGATCACTTTACCTTTACGTAGTGTTGCTGTACAAATATAAGCCGTACCTATTGTGGTA	
241	GCTCTCTAATATCCCATACTATGAAAAACATGGATATGGGGTGGAGGAATTTAATGAAAC	300
	CGAGAGATTATAGGGTATGATACTTTTTGTACCTATACCCCACCTCCTTAAATTACTTTG	
301	CTTATATGATGAATGGGTTAACAAGGGCGACGCACCGGCATTGCCAGAGACTCTTAAAAA	360
	GAATATACTACTTACCCAATTGTTCCCGCTGCGTGGCCGTAACGGTCTCTGAGAATTTTT	
361	TTACAACAAGCTGATGTCCCTTGGCTTCAAGATGGTATTCTTGTCAGGAAGGTACCTTGA	420
	AATGTTGTTCGACTACAGGGAACCGAAGTTCTACCATAAGAACAGTCCTTCCATGGAACT	
421	CAAAATGGCCGTAACAGAAGCAAACCTAATGAAGGCTGGCT	480
	GTTTTACCGGCATTGTCTTCGTTTGGATTACTTCCGACCGA	
481	<u>AATTCTCAAGGATCCACATCTTATGACTCCAAATGCACTTTCATACAAATCAGCAATGAG</u>	540
	TTAAGAGTTCCTAGGTGTAGAATACTGAGGTTTACGTGAAAGTATGTTTAGTCGTTACTC	
541	AGAGAATATGTTGAGGCAGGGATACAGAATTGTTGGAATGATTGGTGATCAATGGAGCGA	600
	TCTCTTATACAACTCCGTCCCTATGTCTTAACAACCTTACTAACCACTAGTTACCTCGCT	
601	TCTGCTTGGAGACCACATGGGCGAATCTAGAACCTTTAAGCTTCCTAATCCCATGTACTA	660
	AGACGAACCTCTGGTGTACCCGCTTAGATCTTGGAAATTCGAAGGATTAGGGTACATGAT	
661	CATGGAGGCGGCCGC 675	
	GTACCTCCGCCGGCG	
	Noti	

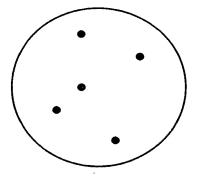
## Figure 5 Colony lift assay to detect protein-protein interactions



Correctly-folded VSPβ variants diffuse through the master filter and bind to the VSPα-coated filter



VSPα-coated filter is incubated with HRP/anti-e tag conjugate



developed VSPαcoated filter

develop filter with substrate (ECL)